

ABSTRACT

Disclosed is a method of preparing *Tricholoma matsutake*-infected young pine trees by coculturing aseptic seedlings of a pine tree with a *T. matsutake* isolate, comprising the steps of liquid-culturing fruit bodies of naturally occurring matsutake mushrooms in PDB (Potatto Dextrose Broth, Difco) and inoculating *T. matsutake* KBFERI 20T05 isolated from the cultured fruit bodies; placing mixed soil of perlite and sphagnum peatmoss and K-liquid medium onto the inoculated fungus; and planting aseptic seedlings obtained by aseptically germinating pine seeds into the mixed soil, and then culturing the pine seedlings with the *T. matsutake* isolate to allow ectomycorrhiza formation on the fine roots of the pine seedlings. The method of the present invention is advantageous in terms of giving objectivity for the fungal inoculum by employing as an inoculum a fungus having DNA homology with the conventionally known *T. matsutake*, and of making it possible to mass produce *T. matsutake*-infected pine trees throughout the Year.